

Logistics

H-60 Seahawk Performance-Based Logistics Program (D-2006-103)

This special version of the report has been revised to omit contractor proprietary data.

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Acronyms

BCA Business Case Analysis

DAU Defense Acquisition University
FAR Federal Acquisition Regulation
FLIR Forward Looking Infra-Red
GAO Government Accountability Office

IPT Integrated Product Team

LMSIC Lockheed Martin Systems Integration
MHSCo Maritime Helicopter Systems Company

NAVAIR Naval Air Systems Command

NAVICP Naval Inventory Control Point-Philadelphia

NAVSUP Naval Supply Systems Command OSD Office of the Secretary of Defense PBL Performance-Based Logistics

RSAS Raytheon Space and Airborne Systems

SAC Sikorsky Aircraft Corporation

USD(AT&L) Under Secretary of Defense for Acquisition, Technology, and

Logistics



INSPECTOR GENERAL DEPARTMENT OF DEFENSE 400 ARMY NAVY DRIVE ARLINGTON, VIRGINIA 22202-4704

August 1, 2006

MEMORANDUM FOR NAVAL INSPECTOR GENERAL

SUBJECT: Report on the H-60 SeaHawk Performance-Based Logistics Program, (Report No. D-2006-103)

We are providing this report for information and use. The Deputy Assistant Secretary (Logistics), Office of the Assistant Secretary Research, Development and Acquisition, Department of the Navy provided comments. We considered management comments on the draft of this report in preparing the final report. The complete text of the comments is in the Management Comments section of the report.

Comments on the draft of this report conformed to the requirements of DoD Directive 7650.3 and left no unresolved issues. Therefore, additional comments are not required.

We appreciate the courtesies extended to the staff. Questions should be directed to Mr. Thomas S. Bartoszek at (703) 604-9619 (DSN 664-9619) or Ms. Nancee K. Needham at (703) 604-9633 (DSN 664-9633). See Appendix E for the report distribution. The team members are listed inside the back cover.

By direction of the Deputy Inspector General for Auditing:

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Assistant Inspector General

Readiness and Operations Support

Department of Defense Office of Inspector General

Report No. D-2006-103

August 1, 2006

(Project No. D2005-D000LD-0113)

The H-60 SeaHawk Performance-Based Logistics Program

Executive Summary

Who Should Read This Report and Why? DoD civil service personnel, uniformed officers, and Government contractors responsible for implementing performance-based logistics should read this report. This report discusses the H-60 SeaHawk performance-based logistics program.

Background. DoD emphasizes performance of a weapons system throughout the system's life cycle. Performance-based logistics is a DoD strategy designed to provide assured levels of system readiness by focusing on systems management and direct accountability. The Quadrennial Defense Review, September 30, 2001, identifies DoD strategic goals for acquisition and logistics that include performance-based logistics.

Performance-based logistics is a support strategy that uses a process of buying performance, rather than spare parts or repair actions, to sustain a weapon system, subsystem, or component. Through a mix of Government and private-sector partnerships, performance-based logistics strategies align required performance outcomes with the operational needs of the warfighter.

Naval Air Systems Command PMA-299 Multi-Mission Helicopter Program Office in Patuxent River, Maryland, manages the H-60 SeaHawk weapon system and is responsible for production, logistics, maintenance, quality control, and training.

Sikorsky Aircraft Company developed and began producing in 1983 the Navy version of the H-60. The missions of the Navy H-60 are anti-submarine warfare, search and rescue, drug interdiction, anti-ship warfare, cargo lift, special operations, and anti-submarine protection for the carrier battle group.

Results. The Program Office and Naval Inventory Control Point identified and documented a sound process for preparing and developing H-60 SeaHawk Business Case Analysis and performance-based logistics strategies. Because the Navy aggressively adopted and implemented the H-60 SeaHawk Performance-Based Logistics strategy, the Program Office realized benefits from the strategy, which included reported increases in availability and reliability, training opportunities, Navy depot workload, and product improvements. However, the Program Office and Naval Inventory Control Point were unable to document their effectiveness in managing the performance-based logistics contracts. We reviewed the management control program as it related to the audit objectives. As a result, the Naval Inventory Control Point could not demonstrate whether H-60 SeaHawk Performance-Based Logistics contract incentive payments were accurate and could not determine if any H-60 SeaHawk Performance-Based Logistics efforts reduced total ownership costs. The Commander, Naval Supply Systems Command needed to establish oversight procedures to verify and document contractor performance, establish time frames for reconciliations and contract modifications, and update the Business Case Analysis. The Commander, Naval Inventory Control Point needed to

establish management controls for contract-required reconciliations. Revising the contractor oversight process would provide DoD the needed assurance that the oversight effectively supports DoD management goals. Recommendations in this report, if implemented, will correct the weakness identified and will improve NAVICP administration of performance-based logistics contracts.

Management Comments and Audit Response. The Deputy Assistant Secretary (Logistics), Office of the Assistant Secretary Research, Development and Acquisition, Department of the Navy provided comments on behalf of the Commander, Naval Supply Systems Command and the Commander, Naval Inventory Control Point-Philadelphia. The Deputy Assistant Secretary concurred with the finding and the recommendations and agreed to issue policy by September 20, 2006, that will provide detailed guidance on contract management and oversight. The Commander, Naval Inventory Control Point agreed to establish an assessable unit to comply with procedures for contract-required reconciliation and ensure adequate and consistent documentation of performance-based logistics contracts. While the Deputy Assistant Secretary concurred with the finding, he proposed minor language changes that would more accurately describe the situation. We considered the Deputy Assistant Secretary's suggestions and incorporated some changes into the final report.

Management comments from the Deputy Assistant Secretary were considered responsive. See the Finding section of the report for a discussion of the management comments and the Management Comments section of the report for the complete comments.

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Background

Performance-Based Logistics. DoD emphasizes performance of weapon systems throughout the system's life cycle. Since FY 2001, Performance-Based Logistics (PBL) has been the DoD-preferred product support strategy.

In general, the intent of a PBL strategy is to provide an assured level of system readiness because it facilitates focusing on system management and direct accountability. The Quadrennial Defense Review, September 30, 2001, identifies DoD strategic goals for acquisition and logistics, which include PBL. PBL uses a process of buying performance, rather than spare parts or repair actions, to sustain a weapon system, subsystem, or component. Through a mix of Government and private-sector partnerships, a PBL strategy aligns required performance outcomes with the warfighters' operational needs.

DoD Directive 5000.1, "The Defense Acquisition System," May 12, 2003, requires that program managers develop and implement PBL strategies that will optimize total system availability while minimizing cost and logistics infrastructure. In August 2004, the Under Secretary of Defense Acquisition, Technology, and Logistics (USD[AT&L]) required that arrangements negotiated for PBL require that contractors meet performance measures such as availability or reliability to improve product support effectiveness while reducing total ownership costs. The memorandum also stated that performance strategies must support five general objectives, including:

- percentage of time a weapon system is available for a mission (operational availability);
- percentage of mission objectives accomplished (operational reliability);
- operating costs divided by a specified unit of measure (cost per unit usage);
- size and presence of support required to deploy, sustain, or move a weapon system (logistics infrastructure); and
- period of time that is acceptable between the demand or request for support and the satisfactory fulfillment of that request (logistics response time).

Office of the Secretary of Defense Guidance. Before FY 2002, the Office of the Secretary of Defense (OSD) did not issue adequate guidance that would help the Military Departments efficiently and consistently make the best choices for PBL implementation. Since FY 2003, however, OSD has stressed the benefits of PBL through improved directives and memorandums. The directives and memorandums provide guidance on using PBL to increase readiness, assign responsibilities of program managers, establish goals for PBL contract awards, and provide principles for developing PBL Business Case Analyses (BCAs) as well as implementing PBL arrangements. See Appendix B for the OSD guidance.

Navy Guidance. The Naval Inventory Control Point-Philadelphia (NAVICP) published the "Naval Inventory Control Point Performance-Based Logistics Guide for Industry" in June 2002. Although it identifies the NAVICP strategic approach to PBL development, the guide also identifies five phases in the PBL development process. Those five phases are (1) candidate selection, (2) exploration and decision-making, (3) contract negotiations and award, (4) implementation, and (5) performance monitoring. As well, the Navy continuously updated the guidance, emphasizing use of PBL support strategies. Assistant Secretary of the Navy (Research, Development, and Acquisition), "Performance Based Logistics Guidance Document," January 27, 2003, articulates the strategy for PBL, identifies characteristics of PBL, and defines PBL roles and responsibilities of Navy program managers.

In an effort to encourage the use of PBL strategies, NAVICP also developed the "Maritime PBL Deskguide," which addresses areas of major concern related to PBL initiatives, including types of agreements, performance metrics and requirements, language for statements of work and objectives, BCA process, and file maintenance procedures. Instructions for the PBL BCA Cost Model are in the NAVICP-issued "BCA Cost Model Desk Reference Guide," dated September 15, 2004. That guide contains instructions for using the BCA model.¹

Support for PBL was furthered when the Assistant Secretary of the Navy (Research, Development, and Acquisition) issued the "DoN Guidebook for Developing Performance Based Logistics Business Case Analysis," September 30, 2005. The guidebook amplifies information and guidance for program managers and costs analysts when developing BCAs for PBLs. See Appendix B for a list of Navy guidance issued between April 2002 and September 2005.

H-60 SeaHawk Helicopter. The Navy designated PBL as a support strategy for the family of H-60 SeaHawk helicopters, including legacy and new production models. The Sikorsky Aircraft Company (SAC) began developing and producing the SeaHawk in 1983. The SeaHawk is a twin-engine, medium lift, utility helicopter, whose missions for the Navy include anti-submarine warfare, search and rescue, drug interdiction, anti-ship warfare, cargo lift, special operations, and anti-submarine protection for the carrier battle group. The H-60R and S models of the SeaHawk, now in production, will replace older legacy models as well as other Navy helicopters.

H-60 SeaHawk Program Management. The Naval Air Systems Command (NAVAIR) PMA-299 Multi-Mission Helicopter Program Office (Program Office) in Patuxent River, Maryland, manages the H-60 SeaHawk weapon system program. The Naval Supply Systems Command (NAVSUP) oversees logistics programs. The areas of logistics include supply operations, contracting, resale, fuel, and transportation. NAVICP, a component of NAVSUP, provides program support to NAVAIR. NAVICP support includes management and funding for the Navy H-60 PBL contracts.

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¹ The BCA model is a decision support tool used to estimate the costs and describe the benefits between alternative product support strategies, such as the existing support strategy versus the proposed alternative. It compares the total estimated product support costs between traditional and PBL strategies to assist in determining the appropriate product support concept required by a performance based agreement.

H-60 PBL Contracts. NAVICP awarded four firm-fixed-price PBL contracts, for a total value of \$658.8 million, for the Navy H-60 SeaHawk. Each contract was for specific Navy-unique items and select H-60 models that use those items. The four contracts were Tip-to-Tail, Forward Looking Infra-Red (FLIR), Dynamic Components, and Avionics.

Tip-to-Tail Contract. The H-60 Tip-to-Tail contract awarded to Maritime Helicopter Support Company² (MHSCo) December 30, 2003, is a \$417 million, 5-year, firm-fixed-price PBL contract to support 540 items.

FLIR Contact. The FLIR contract, awarded to Raytheon Space and Airborne Systems (RSAS) September 30, 2003, is a \$123.2 million, 10-year, firm-fixed-price PBL contract for contractor logistics management of three FLIR items.

Dynamic Components Contract. The Dynamic Components contract, awarded to SAC February 27, 2003, is a \$113 million, 31-month, firm-fixed-price PBL contract that requires them to provide supply management for 14 H-60 items.

Avionics Contract. The Avionics contract, awarded to Lockheed Martin Systems Integration Corporation (LMSIC) May 10, 2002, is a \$5.6 million, 41-month, firm-fixed-price PBL contract requiring that LMSIC provide supply management of 42 avionics items.

See Appendix C for further details on the four PBL contracts.

Objectives

Our overall audit objective was to review the H-60 SeaHawk PBL program and determine what benefits DoD derived from teaming with industry or organic activities for PBL support. Specifically, we evaluated whether NAVICP adequately prepared BCAs for the H-60 and whether cost savings, availability, and reliability data in the BCAs supported the sustainment strategy decision. In addition, we reviewed the management control program as it related to the audit objectives. See Appendix A for a discussion of the scope and methodology and prior coverage related to the objectives.

Management Control Program Review

DoD Directive 5010.38, "Management Control (MC) Program," August 26, 1996, and DoD Instruction 5010.40, "Management Control (MC) Program Procedures," August 28, 1996, require DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance programs are operating as intended and to evaluate the adequacy of the controls.

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² Joint venture of Lockheed Martin Systems Integration, Inc. and Sikorsky Aircraft Corporation.

Scope of the Review of the Management Control Program. We reviewed adequacy of the NAVAIR Program Office, NAVSUP, and NAVICP Management Control Programs. Specifically, we reviewed those commands':

- annual management control certification statements;
- self-evaluations of units responsible for PBL implementation, BCA development, pricing program, contract administration, and the Navy Working Capital Fund; and
- procedures related to PBL implementation, BCA development, pricing program, contract administration, and the Navy Working Capital Fund.

Adequacy of Management Controls. We identified a material management control weakness, as DoD Instruction 5010.40 defines, in contract administration for PBL. NAVSUP procedures for contract administration related to monitoring and documenting contractor performance, reconciling and documenting actual to estimated flight hours, and issuing contract modifications were inadequate and inconsistent.

Recommendations in this report, if implemented, will correct the weakness identified and will improve NAVICP administration of PBL contracts. A copy of this report will be provided to the senior official responsible for management controls in the Office of the Assistant Secretary of the Navy (Research, Development, and Acquisition.) See the finding of this report for recommendations.

Adequacy of Management's Self-Evaluation. NAVICP officials identified contract administration as an assessable unit. During a Procurement Performance Measurement Assessment Program review, NAVSUP officials noted a finding that related to contract administration documentation. However, NAVICP officials did not report the finding as a material control weakness because they concluded that the issue did not relate to compliance to laws and regulations, integrity and professionalism, or management controls.

Management and Oversight of H-60 SeaHawk Performance-Based Logistics Contracts

The Program Office and NAVICP identified and documented a sound process for preparing and developing H-60 SeaHawk BCA and PBL strategies. Because the Navy aggressively adopted and implemented the H-60 SeaHawk PBL strategy, the Program Office realized benefits from the strategy, which included reported increases in availability and reliability, training opportunities, Navy depot workload, and product improvements. However, the Program Office and NAVICP were unable to document their effectiveness in managing the PBL contracts. They could not document their effectiveness because of a lack of adequate contract management and oversight. As a result, NAVICP could not demonstrate whether H-60 SeaHawk PBL contract incentive payments were accurate and could not document if any H-60 SeaHawk PBL efforts reduced total ownership costs.

Guidance and Criteria

Business Case Analysis Guidance. OSD issued memorandum, "Performance Based Logistics (PBL) Business Case Analysis (BCA)," January 23, 2004. The memorandum directs that the Military Department incorporate 11 PBL BCA guiding principles into their respective PBL BCA guidance. DoD requires that the departments perform a cost analysis (the BCA) for competing logistics support strategies. The evaluation determines the economic feasibility of partnering with industry to provide improved weapon system support at the same cost or less than existing support strategies. The process that NAVICP developed identified specific elements that programs should use for developing PBL BCA models. For example, guiding principle number two addresses the need for updating BCAs and states:

BCAs will be conducted to assess changes from existing product support strategies for legacy systems and to support the product support strategy for new weapon systems. Over time, BCAs will need to be updated or repeated to validate the approach taken and to support future plans.

OSD guidance "Performance-Based Logistics: A Program Manager's Product Support Guide," November 2004, incorporates the 11 guiding principles from the January 23, 2004, memorandum. The guidance applies to the entire integrated program office team, including program office personnel, other Government personnel, and industry. As stated in the guidance, BCA is an iterative process. In addition, the guidance also states that efforts to develop a BCA should be consistent with the OSD guiding principles.

Federal Acquisition Regulation. The Federal Acquisition Regulation (FAR) describes roles, responsibilities, and duties associated with contract administration and oversight. FAR 46.104, "Contract Administration Office Responsibilities," states that contract administration assigned to offices with oversight responsibility for the contractor's plant must verify that supplies or services conform to contract quality requirements. The office must also maintain a record of any quality assurance action, including observations made and types of defects noted. FAR 42.1106, "Reporting Requirements," requires that contract administration offices review and verify the accuracy of contractor reports and then advise the contracting office of any required action.

PBL Program Development

The Program Office and NAVICP identified and documented a sound process that supported the H-60 SeaHawk PBL strategy. To create a successful strategy, program offices must evaluate weapon system strategies for logistics support and determine if a performance-based arrangement for logistics is cost effective. The process also includes preparation of a BCA.

PBL Process. The Navy developed the H-60 SeaHawk PBL program through effective use of the PBL guide for industry that NAVICP published in June 2002. The NAVICP identification and implementation of the five-phased PBL development process was a contributing factor toward achieving a well-documented and logical process for the support of the H-60 SeaHawk PBL program. During the candidate selection phase, the Program Office identified the H-60 SeaHawk as a weapon system that could benefit from improved support or reduced support costs under a PBL arrangement. During the exploration and decision-making phase, the Program Office and NAVICP formed an H-60 SeaHawk Integrated Product Team (IPT) who conducted market research, gathered BCA data, and developed the contract statement of work. In the contract negotiation and award phase, NAVICP finalized the H-60 SeaHawk contract statement of work, completed BCA development, and reviewed the contractor's proposal. The implementation phase began after contract award with the selected contractors joining the IPT. The final phase, performance monitoring, involved ensuring customers received materials needed and stakeholders participated in periodic meetings to discuss contractor performance and associated supportability issues. With the development of the five-phased process, the Navy documented the H-60 planned approach and provided parameters, as well as reference points, to guide implementation of PBL.

BCA Process. The Program Office and NAVICP used the IPT to begin the BCA process. The Program Office chaired the IPT; H-60 SeaHawk stakeholders included the NAVICP contracting officer, comptroller, cost analysts, Defense Logistics Agency depot personnel, and suppliers. Members of the IPT gathered data necessary for initiating a BCA and provided the information to the Price Fighters³ unit to complete the BCA.

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³ Price Fighters, a unit of NAVICP, consists of Engineers, Technicians, Cost Price Analysts, Statisticians, and Logisticians who develop the BCA. Price Fighters also directly assist during the actual contract negotiation process in order to defend their recommended position.

To complete the BCAs, the Price Fighters used budget projections and data the IPT provided to calculate costs without PBL and used data obtained from the contractor cost proposals to calculate costs with PBL. To create the BCA model, the comptroller's office from NAVSUP provided BCA costing factors for material, operations, and Defense Logistics Agency costs to the Price Fighters. In addition, NAVSUP sets Naval Cost Recovery Rates that are used to recoup expenditures of the Navy Working Capital Fund⁴ and are included in the calculation of BCA repair prices. Conducting a BCA involves a combination of several logistics areas. Information for a BCA combines commercial and organic support with an emphasis on trying to increase commercial support to the greatest extent possible at the lowest cost.

Included in the "with PBL" and the "without PBL" BCA scenarios were the sustainment costs for the H-60 SeaHawk. The difference between the two scenarios was either a Navy Working Capital Fund cost avoidance or a loss. The cost avoidance amount represented the monetary benefit the Navy planned to achieve by pursuing a PBL strategy. Each of the four H-60 SeaHawk BCAs identified a break-even or better condition before NAVICP awarded the contracts for the H-60 SeaHawk.

H-60 SeaHawk Availability and Reliability

The Navy derived from the PBL strategy benefits in increased availability and reliability. Contractor performance reports from each of the four contractors and several interviews with Navy fleet personnel indicated that using the PBL strategy for the H-60 SeaHawk increased both availability and reliability of the weapon system. Navy Atlantic and Pacific Fleet H-60 SeaHawk wing personnel cited increases in availability of equipment for mission tasking as well as equipment dependability. The contractors tracked availability data for each contract. The contractors were not required, however, to track reliability data on two of the four contracts. The two contracts for which they did not require data were Dynamic Components and Avionics contracts.

Availability. The Tip-to-Tail PBL contract requires that MHSCo provide logistics management of 540 H-60 SeaHawk items. To receive the minimum incentive award, the contract requires that MHSCo maintain an availability rate of 75 percent for the aggregate of the items requisitioned during each performance period. MHSCo also had to achieve an 80-percent availability rate before they could receive the maximum incentive award. MHSCo calculated the availability rate of the items using the number of requisitions filled divided by the total number of requisitions during each incentive period, expressed as a percentage. According to NAVICP, before contract award the average availability of the universe for the Tipto-Tail items was 69 percent. After execution of the Tip-to-Tail contract, MHSCo reported an average availability of better than 90 percent during each of the three incentive

⁴ The Navy Working Capital Fund is a revolving account in which funds are expended and then replaced by income from operations rather than direct Congressional appropriations.

⁵ Availability rates are calculated in the same way on all four contracts.

periods from July 2004⁶ through September 30, 2005. Although stating it validated the contractor-provided data, NAVICP did not maintain documentation of the validation. However, we reviewed all 898 transactions for the period November 1, 2005, through January 31, 2006, and our analysis disclosed that the contractor-reported availability rates were accurate. We could not validate the data for the periods before November 2005 because data were not available.

The FLIR PBL contract requires that RSAS provide logistics management of three FLIR weapon system items. The contract requires that RSAS demonstrate at scheduled performance reviews the actual availability of the contracted items. RSAS would receive a decreased payment if availability rates dropped below 90 percent for any 12-month period. NAVICP and RSAS held six performance reviews and reported that availability rates for the items increased from 44 percent in September 2003 to 100 percent in the first quarter of FY 2004 and remained at 100 percent through September 2005. Although stating that it verified the contractor-provided data, NAVICP did not maintain documentation of the verification. However, we reviewed all 97 transactions for the period April 1, 2005, through September 30, 2005, and our analysis disclosed that the contractor-reported availability rates were accurate.

The Dynamic Components PBL contract requires that SAC provide supply management of 14 H-60 SeaHawk items. The contract requires that SAC demonstrate actual availability of the items at scheduled performance review boards. The contract states that SAC would earn a performance incentive based on its ability to achieve a prescribed availability for each item. Each item had a different availability metric-some based on the actual number of requisitions filled and others on the percentage of requisitions filled. NAVICP and SAC held five performance review boards. At the final performance review board, SAC reported an availability of 95 percent for the 14 contracted items. In addition, by the end of November 2003, SAC also reduced backorders' for the 14 items in the Dynamic Components contract from 78 to zero and maintained zero backorders for the remainder of the contract performance ending September 30, 2005. Before awarding an incentive fee, the contracting officer had a NAVICP logistician verify the contractor data for accuracy. We reviewed the logistician's analysis and determined that the process used was adequate. The logistician documented the analysis in a memorandum to the contracting officer.

The Avionics PBL contract requires that LMSIC provide supply management of 42 avionics items. The contract requires that LMSIC demonstrate actual availability of the items at scheduled performance reviews. To determine the amount of incentive earned in each performance period, the contractor had to maintain a specific average availability. NAVICP and LMSIC held five performance reviews throughout the contract. The contractor reported that availability rates increased from 68 percent in April 2003 to 100 percent in December 2003. Although stating that it validated the contractor-provided data, NAVICP did not maintain documentation of the validation. We did not verify the availability data because

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⁶ Performance for contract award December 2003 through June 2004 was a preparation period and availability rates were not required to be tracked.

⁷ Backorders are requisitions that are unfilled by the delivery time specified in the contract.

NAVICP and LMSIC mutually terminated the Avionics contract in December 2003 and transferred management of the 42 avionics items to the Tip-to-Tail contract.

Reliability. The Tip-to-Tail PBL Phase I contract requires that MHSCo track reliability rates for 62 items during the contract. NAVICP established reliability baseline rates in the Tip-to-Tail contract for each of those items. The contract also requires that MHSCo report during quarterly program management reviews when the 27-month moving average failure rate for any of the items exceeded a predefined limit (one standard deviation⁸) above the reliability baseline. The contract defines a reliability metric as the sum of all failures for each item over the last nine contract performance quarters per 100,000 flying hours. The contractor did not begin reporting the reliability metric until the second quarter of FY 2005. We analyzed the MHSCo data, and determined that the moving average failure rates for 90 percent of the tracked items did not exceed the predefined limit of the reliability baseline rate.

The FLIR PBL contract requires that RSAS develop a reliability program that includes data collection, performance reviews, and failure analysis. RSAS reported results of the reliability program in quarterly reports and during quarterly failure review boards. The contract required tracking of reliability by the mean-time-between-failure⁹ and the mean-time-between-unscheduled-removal. For each of the three parts, the contract established a March 2005 reliability baseline and required increases in reliability by the end of March 2006 and March 2008. In November 2005, the contractor reported exceeding the mean-time-between-failure metrics by more than 50 percent, which placed RSAS above the March 2008 contract requirements. NAVICP did not validate the contractor-provided data. We reviewed the RSAS process for equipment performance reporting and found that RSAS had a well-integrated process to collect, compile, and report reliability data on the H-60 SeaHawk contract. Also, personnel interviewed from the Naval Atlantic Fleet H-60 SeaHawk Wing stated that reliability of the FLIR components increased since RSAS began managing FLIR PBL items.

Management Initiatives

Management aggressively adopted and implemented the PBL concept, which resulted in other benefits for the H-60 SeaHawk to include PBL and contractor-provided training, additional Navy depot workload in compliance with applicable laws, and contractor-provided process improvements. See Appendix D for further details on management initiatives.

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⁸ In a normal distribution of data, most of the examples in a set of data are close to the average, while relatively few examples tend to one extreme or the other. The standard deviation is a statistic that tells how tightly all the various examples are clustered around the average in a set of data.

⁹ Mean-time-between-failure is a basic measure of reliability for repairable items. Mean-time-between-failure is the average time during which all parts of the item perform within their specified limits, during a particular measurement period under stated conditions.

¹⁰ Mean-time-between-unscheduled-removal is a basic measure of reliability for repairable fielded systems. Mean-time-between-unscheduled-removal is the average time between unscheduled maintenance actions requiring removal and replacement of a box or subsystem.

Management of PBL Contracts

NAVICP inconsistently applied procedures for contract management and inadequately documented oversight of PBL contracts. Specifically, NAVICP did not adequately monitor and document contractor performance, reconcile flight hours in a timely manner, issue timely contract modifications, and determine actual cost avoidances. In addition, the procedures NAVICP implemented for contract oversight differed among contracting personnel who managed and oversaw the four firm-fixed-price PBL contracts.

Monitoring and Documenting Contractor Performance. NAVICP procedures and documentation for monitoring H-60 SeaHawk PBL contracts were inadequate.

NAVICP officials did not adequately document their review of the reported performance of contractors for three of the four PBL contracts. For example, the Tip-to-Tail contract requires that MHSCo calculate performance availability and reliability rates as well as adjustments to the rates. Immediately following completion of an incentive performance period, the contract states that MHSCo must present the results to the Navy at program management reviews. In addition to calculating rates, MHSCo was responsible for maintaining availability performance data for items delivered as well as tracking reliability of items managed. NAVICP awarded contract performance incentives to MHSCo based on availability rates achieved and reported during each incentive period.

NAVICP used operational data that the MHSCo management information system originally captured to validate the contractor's performance rates during the contract. In addition, NAVICP led a quarterly program management review board that analyzed the performance data to determine if MHSCo performed as required. However, NAVICP did not retain documentation detailing how often and what data they randomly verified and did not record the minutes of the six program management review board meetings. We verified the accuracy of the Tip-to-Tail availability rates for the period November 1, 2005, through January 31, 2006.

NAVICP also did not have procedures for monitoring performance improvement or verifying the results. On the FLIR contract, for example, RSAS held six failure review boards where they reported the operating hours for FLIR equipment and the number of relevant equipment failures. During those meetings, NAVICP discussed the equipment failures. However, NAVICP did not have a process or procedures for checking or verifying reported equipment-operating hours. Navy personnel from the Atlantic Fleet indicated that the reliability of H-60 SeaHawk FLIR parts increased since the parts became contractor managed. However, without verification of the operating hours, the Navy had no assurance that contract performance RSAS reported was accurate and complete.

Reconciling Flight Hours. NAVICP did not perform required annual flight hour reconciliations for the Tip-to-Tail PBL contract and did not follow the contract specified reconciliation procedures for the FLIR contract.

Contract Required Reconciliation. For the Tip-to-Tail contract, NAVICP did not perform the required reconciliations of projected and actual H-60 SeaHawk helicopter flight hours. NAVICP issued an individual delivery order that covered each performance period of PBL support. NAVICP based the contract price for PBL support on projected annual flight hours and aircraft quantities. According to the contract, NAVICP would adjust the contract after completing each performance period. Adjustments in the contract were to be based on actual Navy-certified H-60 SeaHawk flight hours.

Each December, the Navy certified and published in the Budget Analysis Report actual H-60 SeaHawk flight hours for the previous fiscal year. The Tipto-Tail contract terms state that if actual flight hours were greater than 125 percent or less than 75 percent of the projected flight hours, or if the actual number of aircraft flown were greater than 125 percent or less than 75 percent of projected quantities, pricing of PBL support would be subject to an equitable adjustment. As of the end of audit field work, NAVICP did not perform an analysis determining whether the actual flight hours were in the acceptable range for performance periods that ended September 30, 2004, or September 30, 2005. NAVICP also could not determine if equitable adjustments were appropriate.

Reconciliation Procedures. NAVICP did not reconcile the FY 2004 projected H-60 SeaHawk flight hours with Navy-certified actual flight hours in accordance with FLIR contract requirements. A projected number of H-60 SeaHawk aircraft flying hours, taken from the Budget Analysis Report, was the basis for pricing the FLIR PBL contract. The contract required annual reconciliation of projected hours to the total actual flight hours. According to the contract, only when the difference between projected and actual H-60 SeaHawk flight hours was 15 percent or greater could either party request a contract price adjustment. Using the reconciliation method that the contract required, actual flight hours for FY 2004 were 20 percent less than projected flight hours. The contractor reported at the November 4, 2004, program management review with NAVICP that the reconciled flight hours were 2 percent greater than the projected hours. However, the reconciliation method the contractor used was not in accordance with contract requirements. The contractor used FLIR system operating hours rather than actual H-60 SeaHawk flight hours published in the Budget Analysis Report that the contract required. NAVICP did not reconcile the flight hours for FY 2004, and therefore, did not negotiate and issue a price modification to the FLIR PBL contract. If NAVICP determined that the FLIR system operating hours is a more accurate basis for pricing the contract than the Budget Analysis Report, then NAVICP should issue a contract modification to change the flight hour requirement and perform the required reconciliation. The Navy would have had an additional cost avoidance of \$4.1 million during FY 2005 had NAVICP accomplished the FY 2004 flight hour reconciliation as required.

Issuing Contract Modifications. NAVICP did not make timely H-60 Tip-to-Tail or Dynamic Components contract modifications and did not maintain documentation of how Dynamic Components contract modifications were developed.

Tip-to-Tail. NAVICP did not issue in a timely manner contract modifications for the performance period ending September 30, 2004. When NAVICP issued the contract, MHSCo proposed costs based on a projected mix of ready-for-issue parts and parts waiting repair to be transferred from DoD to MHSCo control. Because the actual mix of parts transferred to MHSCo differed from the projected mix, NAVICP planned to issue a contract modification adjust for the difference. NAVICP also planned to include in the contract modification the cost impact (if any) from reconciliation of flight hours. As of the end of audit field work, NAVICP had not reconciled actual inventories of H-60 SeaHawk parts transferred to MHSCo control with the projected mix of DoD inventory.

Dynamic Components. NAVICP did not adequately maintain documented evidence of the process used for making contract price adjustments and contract modifications that reduced the contract price by \$15.9 million. After reconciling the actual and projected flight hours, the contracting officer determined that the billed amount for FY 2003 and FY 2004 was greater than the revised total contract price. However, the contracting officer did not issue until June 2005 the modifications for the FY 2003 and FY 2004 price adjustments, an 18-month and 5-month delay, respectively. Modifications issued for flight hour reconciliations and incentive fees reduced the program price by \$4.7 million in FY 2003 and \$11.2 million in FY 2004.

Determining Actual Cost Avoidance. NAVICP did not revalidate the choice of PBL as the support strategy by updating the four H-60 SeaHawk BCAs.

OSD guidance, "Performance Based Logistics (PBL) Business Case Analysis (BCA)," January 23, 2004, states that organizations must assess through BCAs on legacy systems the change from existing product support strategies to PBL strategies. To validate the approach taken and to support future plans, the guidance also requires that officials update the BCAs. Before NAVICP awarded the four H-60 SeaHawk PBL contracts, they conducted BCAs designed to determine if the PBL strategy was the appropriate choice for sustainment of the managed items under the proposed contracts. At the time of contract award, the results of the BCAs determined that the:

- Tip-to-Tail PBL contract should produce \$ * in cost avoidance without incentives or \$ * with incentives over 5 years.
- FLIR PBL contract should produce \$ * in cost avoidance over 10 years.
- Dynamic Components PBL contract should produce \$ * in cost avoidance without incentives, or \$ * with incentives.
- Avionics PBL contract should produce \$ * in cost avoidance without incentives, or \$ * with incentives.

*

^{*}This section of the report contains source selection sensitive or contractor proprietary information that has been omitted.

To monitor PBL contracts, NAVICP personnel typically relied on cost and performance data that contractor information systems generated. NAVICP, however, did not determine whether contractor-provided data were sufficiently reliable to update the BCA for the H-60 SeaHawk Tip-to-Tail contract. Consequently, NAVICP did not have reliable Government data that could validate assumptions used in the BCAs and determine whether PBL arrangements achieved expected cost savings. NAVICP monitoring of the contractor's systems is vital for ensuring the accuracy of expected costs under the contracts, validating the business case decision used to justify a PBL arrangement, and obtaining the data necessary to renegotiate contracts and negotiate follow-on contracts.

The Dynamic Components contract ended on September 30, 2005, after 31 months of performance, and according to OSD guidance, NAVICP should have validated the choice of PBL as the sustainment strategy by updating the BCA. NAVICP did not update the BCA for the Dynamic Components contract before the contract ended and before they transferred management of the Dynamic Components items to the Tip-to-Tail contract. As a result, NAVICP could not determine the actual cost avoidance associated with the Dynamic Components contract.

The Avionics PBL contract was in effect for approximately 19 months. By mutual agreement between the Navy and the PBL contractor, Avionics items were rolled into the Tip-to-Tail PBL contract in January 2004. NAVICP did not subsequently update the original Avionics BCA with actual costs. Without updating the BCA with actual costs, the Navy could not determine whether it achieved the cost avoidance that the BCA projected.

NAVSUP PBL Contracting Oversight Procedures. NAVSUP did not issue written standardized procedures and did not identify NAVICP roles and responsibilities for PBL contract management and oversight. NAVSUP did not clearly define or standardize the procedures for verifying and documenting contractor performance, reconciling flight hours, and issuing timely contract modifications. While the FAR provides contract administration guidance, it allows for flexibility in application. The NAVICP monitoring of contractor performance was inconsistent for the H-60 SeaHawk PBL contracts. NAVSUP did not have policy, procedures, or guidance for updating BCAs, that would have determined actual cost avoidance realized on PBL contracts.

Because standardized policy and procedures for monitoring PBL contracts did not exist, the four contracting officers used inconsistent procedures for monitoring their applicable PBL contract. For example, according to the Contracting Officer for the Tip-to-Tail contract, NAVICP performed random checks of operational data intended to validate availability results the contractor reported. For the Dynamic Components contract, the contracting officer had a NAVICP logistician verify before awarding an incentive fee all the contractor data for accuracy, which included availability metrics reported at each of five performance review boards. In addition, NAVICP had not updated the four BCAs since contract award.

NAVSUP should establish policy and procedures so contracting personnel consistently perform and document required reconciliations as well as issue contract modifications in a timely manner. NAVICP must update BCAs to determine if the Navy realized projected cost avoidances and if the PBL approach remains valid.

Conclusion

Because the Navy aggressively adopted the PBL strategy and effectively used OSD-improved guidance and training, the H-60 SeaHawk PBL Program Office and NAVICP developed a sound process that supported the H-60 SeaHawk PBL strategy. In addition, the NAVICP PBL process resulted in the Navy reporting benefits such as increases in availability and reliability of PBL-managed items, contractor-provided training, depot workloads, and product improvements.

NAVICP should improve some of its contract administration procedures. Because it inconsistently and inadequately documented monitoring of contractor performance, NAVICP could not provide evidence that the results the contractors reported justified the incentives paid. Without written procedures requiring contractor monitoring, reconciling flight hours, issuing contract modifications, and updating PBL BCAs, the Navy will not have a high degree of confidence that the PBL process is the correct and most effective approach for the H-60 SeaHawk program. In addition, without documentation the Navy has no guarantee that PBL contractors earned as of December 2005 the \$6.1 million incentive fees paid for the contract performance periods.

Management Comments on the Finding and Audit Response

Deputy Assistant Secretary (Logistics), Office of the Assistant Secretary Research, Development and Acquisition, Department of the Navy Comments. The Deputy Assistant Secretary concurred with the finding and recommended changes to the report language to more accurately describe the situation.

Audit Response. We considered the Deputy Assistant Secretary's comments responsive and incorporated some changes into the final report on pages 5 and 14.

Recommendations, Management Comments, and Audit Response

- 1. We recommend that Commander, Naval Supply Systems Command establish management and oversight written procedures for performance-based logistics contracts that require the Naval Inventory Control Point-Philadelphia:
- a. Verify and document results of all contractor-reported performance metrics and maintain evidence of the verification.
- b. Establish a time frame for performing flight hour and other required reconciliations consistent with the contract requirements, complete those reconciliations within the time frame, and document the results.

- c. Establish a time frame for completing performance-based logistics contract modifications related to reconciliations and require issuance of the modifications in accordance with the time frame.
- d. Periodically update performance-based logistics business case analyses to determine if the Navy realized the projected cost avoidances and if the PBL approach remains valid.

Deputy Assistant Secretary (Logistics), Office of the Assistant Secretary Research, Development and Acquisition, Department of the Navy Comments. The Deputy Assistant Secretary concurred with Recommendation 1.a. and plans to issue policy on verifying results of contractor-reported performance metrics and on maintaining evidence of the verification. The Navy plans to publish the policy by September 20, 2006.

The Deputy Assistant Secretary also concurred with Recommendation 1.b. and agreed to issue guidance on completing required reconciliations consistent with contract requirements within the time frame and to document the results. The Navy plans to publish policy by September 20, 2006.

The Deputy Assistant Secretary partially concurred with Recommendation 1.c. and acknowledged that the Navy should expeditiously negotiate and complete contract modifications related to reconciliations. He stated, however, that contract modification negotiations can be complex and that the Navy should not set artificial or standardized time frames for completion of those modifications. The Deputy Assistant Secretary plans to publish policy by September 20, 2006.

The Deputy Assistant Secretary concurred with Recommendation 1.d. The Deputy Assistant Secretary stated that Business Case Analysis for fixed-price performance-based logistics arrangements will be updated when changes in the underlying assumptions result in modifications to the original contract cost while cost-plus performance-based logistics arrangements will be updated annually. The Naval Supply Systems Command plans to publish policy by September 20, 2006.

Audit Response. The Deputy Assistant Secretary comments are considered responsive and meet the intent of the recommendations.

2. We recommend that Commander, Naval Inventory Control Point-Philadelphia establish management controls that ensure compliance with the procedures for contract-required reconciliation.

Deputy Assistant Secretary (Logistics), Office of the Assistant Secretary Research, Development and Acquisition, Department of the Navy Comments. The Deputy Assistant Secretary concurred with the recommendation. The NAVICP will establish an assessable unit to comply with procedures for contract-required reconciliation and ensure adequate and consistent documentation of performance-based logistics contracts. The target completion date is December 1, 2006.

Audit Response. The Deputy Assistant Secretary comments are considered responsive and meet the intent of the recommendation.

Appendix A. Scope and Methodology

We evaluated the Navy's progress in developing and implementing PBL contracts for the H-60 SeaHawk Program. We assessed adequacy and completeness of the Tip-to-Tail, FLIR, Dynamic Components, and Avionics H-60 SeaHawk PBL BCAs, as well as the Navy's process for development and implementation of the H-60 SeaHawk PBL contracts.

We interviewed personnel responsible for PBL development and implementation at the Assistant Deputy Under Secretary of Defense (Logistics Plans and Programs); the Office of the Assistant Secretary of the Navy (Research, Development, and Acquisition); NAVAIR; NAVSUP; NAVICP; Naval Air Depot North Island, California and Naval Air Depot Jacksonville, Florida. In addition, we interviewed representatives from H-60 PBL contractors: MHSCo, RSAS, LMSIC, and SAC. We also interviewed customer representatives from the Navy Atlantic and Pacific Fleet H-60 SeaHawk wings.

We reviewed laws, DoD Directives and Instructions, as well as OSD and Naval PBL guidance memorandums (see Appendix B for a detailed list). In addition, we reviewed the Tip-to-Tail, FLIR, Dynamic Components, and Avionics H-60 SeaHawk PBL contracts and BCAs and associated NAVAIR Depot Commercial Service Agreements.

We performed this audit from February 2005 through March 2006 in accordance with generally accepted government auditing standards.

Use of Computer-Processed Data. We relied on limited computer-processed data to perform this audit. Use of computer-processed data included data Navy and the H-60 SeaHawk PBL contractors provided. We did not assess reliability of the information because the data from systems were not a basis for our conclusions or finding.

Government Accountability Office High-Risk Area. The Government Accountability Office (GAO) has identified several high-risk areas in DoD. This report provides coverage of DoD Supply Chain Management high-risk area.

Prior Coverage

During the last 4 years, the GAO and the Department of Defense office of Inspector General (DoD IG) issued five reports discussing PBL. Unrestricted GAO reports can be accessed over the Internet at. Unrestricted DoD IG reports can be accessed at http://www.dodig.mil/audit/reports.

GAO

GAO Report No. GAO-05-966 "Defense Management - DOD Needs to Demonstrate That Performance-Based Logistics Contracts Are Achieving Expected Benefits," September 9, 2005

GAO Report No. GAO-04-715, "Defense Management - Opportunities to Enhance the Implementation of Performance-Based Logistics," August 16, 2004

GAO Report No. GAO-02-306, "Opportunities to Improve the Army's and the Navy's Decision-making Process for Weapons Systems Support," February 28, 2002

DoD IG

DoD IG Audit Report No. D-2005-037 "Logistics - Implementation of Performance-Based Logistics for the Javelin Weapon System," March 7, 2005

DoD IG Audit Report No. D-2004-110 "Logistics - The Military Departments' Implementation of Performance-Based Logistics in Support of Weapon Systems," August 23, 2004

Appendix B. Office of the Secretary of Defense and Department of Navy Performance-Based Logistics Guidance

OSD Guidance. OSD issued from September 2001 through November 2004 the following PBL-related Directives and Memorandums.

The Quadrennial Defense Review, September 2001, mandated implementation of PBL and modern business systems with appropriate metrics designed to compress the supply chain, remove non-value-added steps, and improve readiness for major weapons systems and commodities.

USD(AT&L) Memorandum, "Performance Based Logistics," February 13, 2002, requires that Service Acquisition Executives submit a PBL implementation schedule that includes the "decision criteria used to conduct the business case analysis for legacy systems." The memorandum also identifies all DoD regulations and guidance for implementation of PBL in the Military Departments.

USD(AT&L) Memorandum, "Total Life Cycle Systems Management (TLCSM) and Performance Based Logistics (PBL)," March 7, 2003, identifies implementation of the Future Logistics Enterprise as a top priority for achieving the objective of using PBL. The Future Logistics Enterprise emphasizes use of Total Life Cycle Systems Management and PBL to improve readiness. The memorandum provides a template as a synopsis of key activities and outputs to assist program managers in effectively implementing Total Life Cycle Systems Management and PBL.

DoD Directive 5000.1, "The Defense Acquisition System," May 12, 2003, provides policy and procedures for managing all acquisition programs and authorizes publication DoD Instruction 5000.2, "Operation of the Defense Acquisition System," May 12, 2003. The directive defines performance-based acquisition as the DoD-preferred strategy for acquiring and sustaining products, and emphasizes its use whenever feasible to maximize competition, innovation, interoperability, and reduce costs. DoD Directive 5000.1 also identifies the Program Manager as the individual with responsibility and authority to accomplish program objectives for development, production, and sustainment to meet the user's operational needs. The DoD instruction further assigns responsibility to the Program Manager for developing and implementing performance-based logistics.

USD(AT&L) Memorandum, "Performance Based Service Acquisitions," August 19, 2003, emphasizes the need for continuing use of performance-based service acquisitions. The memorandum establishes a goal to award 50 percent of service contracts with performance-based specifications by FY 2005. The memorandum also directs that Military Departments submit an annual report on the percentage of services contract dollars awarded using performance-based service acquisitions.

USD(AT&L) Memorandum, "Performance-Based Logistics (PBL) Business Case Analysis (BCA)," January 23, 2004, provides guiding principles to Military Departments for developing PBL BCAs and directs that Military Departments incorporate the guidelines in their PBL BCA guidance.

USD(AT&L) Memorandum, "Performance Based Logistics (PBL) and the Business Case Analysis (BCA)," March 20, 2004, provides additional guidance for assessing the potential application of PBL strategies. The memorandum states that a September 2006 deadline for PBL BCAs was established by another policy document, the Strategic Planning Guidance. The Strategic Planning Guidance requires that the Services complete by September 2006 a BCA for potential PBL strategies on all new and fielded Acquisition Category I and II programs. The USD(AT&L) memorandum establishes criteria for the Military Departments to use in the analysis of Acquisition Category I and II programs that have not employed a PBL strategy so they will be in compliance with the Strategic Planning Guidance deadline.

USD(AT&L) Memorandum, "Performance Based Logistics: Purchasing Using Performance Based Criteria," August 16, 2004, provides guidance to the Military Department Secretaries on purchasing weapon system logistics support using performance-based criteria. The guidance is the result of a Deputy Secretary of Defense memorandum, "Implementation of the Defense Business Practice Implementation Board (DBB) Recommendation to the Senior Executive Council (SEC) on Continued Progress on Performance Based Logistics," February 4, 2004, that directs such guidance be issued.

USD(AT&L) Memorandum, "Performance-Based Logistics Product Support Guide," November 10, 2004, introduces the "Performance-Based Logistics: A Program Manager's Product Support Guide." The November 10, 2004, memorandum states that the implementation of PBL throughout DoD was resulting in "significant cost savings and improved capability." The guide provides revised guidance for implementing PBL and incorporates lessons learned from successful application of PBL in other DoD Programs. The memorandum further directs use of the guide by program managers and product support managers when designing and assessing supportability in DoD weapon systems.

Navy Guidance. The Department of the Navy issued from April 2002 through September 2005 the following PBL-related guidance.

Assistant Secretary of the Navy (Research, Development, and Acquisition), "Department of the Navy Performance Based Logistics (PBL) Implementation Plan," April 26, 2002. The plan describes Navy initiatives to implement PBL and defines the goal, objectives, strategy, and approach for implementing PBL. In addition, the plan includes a complete schedule of Navy programs and PBL initiative start dates.

NAVICP "Performance Based Logistics Guide for Industry," June 2002, identifies the five major phases in PBL development.

Assistant Secretary of the Navy (Research, Development, and Acquisition), Memorandum "Performance Based Logistics Guidance Document," January 27, 2003, articulates PBL strategy, identifies the characteristics of PBL and defines PBL roles and responsibilities for program managers.

NAVICP "Maritime PBL Deskguide," undated, addresses major areas of concern related to PBL initiatives, including the different types of PBL agreements, performance metrics and requirements, the language used for a PBL statement of work and objectives, BCA process, and file maintenance procedures.

NAVICP "BCA Cost Model Desk Reference Guide," September 15, 2004, provides instructions for the PBL BCA Cost Model. The guide provides instructions regarding what data to enter into the model and why to enter the data. In addition, the guide identifies sources for some BCA data elements. The guide also identifies the purpose of the BCA Cost model as a tool to identify cost avoidances and savings for the Navy Working Capital Fund.

NAVICP "Virtual SYSCOM Business Rules for Performance-Based Logistics (PBL) Initiatives," January 2005, incorporates established guidance provided by OSD, government statutes, and the Navy. The guide provides an overview of policies and processes to follow in developing and executing PBL initiatives when coordinating across agencies.

Assistant Secretary of the Navy (Research, Development, and Acquisition), "DoN Guidebook for Developing Performance Based logistics Business Case Analysis," September 30, 2005, provides amplifying guidance and information for program managers and cost analysts in the development of PBL BCAs.

Appendix C. Performance-Based Logistics H-60 SeaHawk Contracts

NAVICP awarded four PBL contracts, valued at \$658.8 million, for the H-60 SeaHawk. Each contract was for specific Navy-unique items and select H-60 models that use the items. The four PBL contracts are the Tip-to-Tail, FLIR, Dynamic Components, and Avionics.

H-60 Tip-to-Tail Contract. The H-60 Tip-to-Tail Phase I contract awarded to MHSCo December 30, 2003, is a \$417 million, 5-year, firm-fixed-price PBL contract for support of 540 items. MHSCo was responsible for establishing and operating the H-60 SeaHawk PBL Program in support of Navy H-60B, F, H, and S models, Coast Guard HH-60J, and Navy Foreign Military Sales H-60 customers. Those Foreign Military Sales customers included Australia, Greece, Spain, Thailand, and Taiwan. The firm-fixed price contract also included \$10 million in available performance incentives the contractor would receive if it achieved pre-defined performance measures.

H-60 FLIR Contract. The FLIR contract, awarded to RSAS September 30, 2003, is a \$123.2 million, 10-year, firm-fixed-price PBL contract for logistics management of three items. The contract requires that RSAS maintain, repair, and manage 86 FLIR units the Navy uses on its H-60 helicopters. The FLIR contract did not include performance incentives; instead, it penalized the contractor for not meeting minimum availability requirements.

H-60 Dynamic Components Contract. The Dynamic Components contract, awarded to SAC February 27, 2003, is a \$113 million, 31-month, firm-fixed-price PBL contract requiring that SAC provide supply management of 14 items in support of Navy's H-60B, F, H, R, and S models, Coast Guard HH-60J, and Navy foreign military sales H-60 helicopters. The contract ended September 30, 2005. Supply management of 11 of the 14 items transferred to the Tip-to-Tail Phase I contract in the first quarter of FY 2006. The remaining three items transferred to the Tip-to-Tail Phase II contract during the second quarter of FY 2006. The firm-fixed price contract also included \$5 million in available performance incentives that the contractor would receive if it achieved pre-defined performance measures.

Avionics PBL Contract. The Avionics contract, awarded to LMSIC May 10, 2002, is a \$5.6 million, 41-month, firm-fixed-price PBL contract requiring that LMSIC provide supply management of 42 avionics items for the SH-60B model helicopters. By mutual agreement, NAVICP terminated the contract on December 30, 2003, and supply management of the 42 avionics items transferred to the Tip-to-Tail Phase I contract. The firm-fixed price contract also included \$280,000 in available performance incentives that the contractor would receive if it achieved pre-defined performance measures.

Appendix D. Other Management Initiatives

Management aggressively adopted and implemented the PBL concept, which resulted in other benefits for the H-60 SeaHawk to include PBL and contractor-provided training, additional Navy depot workload in compliance with applicable laws, and contractor-provided process improvements.

Navy Adoption of PBL Strategies. Management aggressively adopted and implemented the PBL concept. The Navy's assertiveness originated with high-level officials in considering PBL as the department's preferred strategy for product support. Evidence of the Navy's aggressiveness included the Office of the Assistant Secretary of the Navy (Research, Development, and Acquisition) issuing a comprehensive policy on PBL implementation. The policy, "Department of the Navy Performance-Based Logistic Guidance Document," January 27, 2003, defines PBL roles and responsibility of program mangers.

Availability of PBL Training. Another aspect that helped contribute to the success of the Navy's PBL development was an increase in the availability of training. The increase as well as the quality of training led to a higher degree of trained employees. The Defense Acquisition University (DAU), which is the corporate university of the DoD acquisition, technology, and logistics work force, offers training courses for a Life-Cycle Logistics Career Track and a PBL Continuous Learning Module. Since DAU launched the module in FY 2002, almost 1,700 students have graduated. As of January 2006, DAU reported that 283 Navy personnel completed the training module.

DAU also developed other training courses relating to PBL. That curriculum includes courses entitled PBL Part A, Logistics 235A and PBL Part B, Logistics 235B. The classes provide a working level understanding of performance-based support strategies. PBL Part A requires 50 hours of online study and PBL Part B is a 5-day course of classroom study. As of January 2006, DAU reported more than 2,200 Navy personnel completed the PBL Logistics 235 courses, with 860 assigned to NAVAIR. To assist program and logistics managers in developing and executing PBL strategies, DAU developed a PBL Toolkit. The university supports PBL by providing lecturers and workshops throughout the United States.

Contractor-Provided Training. The contractors' field service representatives trained Navy personnel at no increased cost to the PBL contract. On the FLIR contract, RSAS made five field survey and site visits to the fleet. Between October 2003 and September 2005, RSAS trained 38 fleet personnel on system theory, aircraft system operation, failure trends, and improvement initiatives. In addition, RSAS planned to produce a periodic newsletter for inclusion on the H-60 SeaHawk Web site. The newsletter would contain system theories, troubleshooting advice, and technical explanations. On the Tip-to-Tail contract, LMSIC and SAC provided field service representatives for items the contract supported. For example, LMSIC identified a training shortfall at NAVAIR North Island Depot, California, and to address the shortfall, they funded and provided the needed training to Navy depot personnel. That training was on the operation of legacy test equipment and occurred from October 18 through October 21, 2005. In addition, MHSCo conducted training events at both of the North Island, California, and Jacksonville, Florida, NAVAIR Depots.

Navy Depot Workload. Before implementing the SeaHawk PBL, the Navy relied on contractor depot-level repair capability for the FLIR system. The PBL support strategy identified a weakness in maintaining a Government core logistics capability as title 10 of the United States Code¹¹ requires. The strategy established a partnership between the NAVAIR Depot Jacksonville and RSAS. The public-private partnership contributed greatly to the success of the FLIR PBL support concept by effectively using the NAVAIR professional labor workforce and the RSAS industrial management expertise. NAVAIR benefited by adding additional maintenance capability and workload within the Navy's depot system.

Product Improvements. PBL should motivate contractors to improve component and system reliability because the strategy provides the foundation for reducing costs and increasing profits as well as product improvements. The H-60 SeaHawk PBL contracts required that the contractors manage and resolve problems with obsolescence, ¹² including loss or impending loss of suppliers. Contractors should additionally serve their best interests by increasing reliability of items managed, which ultimately reduces the number and frequency of repairs or replacement parts. Contractors may propose a change to managed items that does not affect form, fit, or function of the item and make improvements with their own funds. Changes typically increase reliability or prevent obsolescence. Repair costs to the contractor are, therefore, reduced, and DoD receives the benefit of more reliable parts at no increased cost to the PBL contract. Examples of product improvements were evidenced in the H-60 Dynamic Components and FLIR PBL programs. In those programs, contractors took steps toward product improvements for their respective PBL items. SAC identified more than 70 product improvements on the Dynamic Components contract. RSAS also identified product improvements through their Reliability Growth Program.

Applying management analysis methods, RSAS identified failure trends and constructed two modification kits, Reliability Growth Kit 1 and 2, for installation in FLIR assemblies. Reliability Growth Kit 1 focused on the primary modes of equipment failure. The Navy will fully incorporate the kit into the fleet by early FY 2007. Reliability Growth Kit 2 improved the equipment fans, seals, gaskets, and electronic circuitry. Installations are scheduled for completion by the second quarter of FY 2008. Additional RSAS improvement initiatives included a control panel modification, a maintenance power-checker test box that will reduce maintenance-induced failures, and repair process improvements to reduce water, loose hardware, foreign material, and wire damage. SAC and RSAS initiated, developed, and implemented the improvements at no increased cost to the PBL contract.

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Section 2464, title 10, United States Code core logistics capability requires that DoD shall "maintain a core logistics capability that is Government-owned and Government-operated (including Government personnel and Government-owned and Government-operated equipment and facilities) to ensure a ready and controlled source of technical competence and resources necessary to ensure effective and timely response to a mobilization, national defense contingency situations, and other emergency requirements."

¹² Obsolescence impacts all systems when technology advancements result in components, subassemblies, and assemblies are threatened with nonavailability for critical production or sustainment.

Appendix E. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Technology, and Logistics
 Under Secretary of Defense (Comptroller)/Chief Financial Officer
 Deputy Chief Financial Officer
 Deputy Comptroller (Program/Budget)
 Director, Program Analysis and Evaluation

Department of the Navy

Assistant Secretary of the Navy (Manpower and Reserve Affairs) Naval Inspector General Auditor General, Department of the Navy

Department of the Air Force

Auditor General, Department of the Air Force

Other Defense Organizations

Director, Defense Contract Audit Agency Director, Defense Contract Management Agency Director, Defense Logistics Agency

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations

Senate Subcommittee on Defense, Committee on Appropriations

Senate Committee on Armed Services

Senate Committee on Governmental Affairs

House Committee on Appropriations

House Subcommittee on Defense, Committee on Appropriations

House Committee on Armed Services

House Committee on Government Reform

House Subcommittee on Government Efficiency and Financial Management, Committee on Government Reform

House Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform

House Subcommittee on Technology, Information Policy, Intergovernmental Relations, and the Census, Committee on Government Reform

Department of the Navy Comments



DEPARTMENT OF THE NAVY

OFFICE OF THE ASSISTANT SECRETARY RESEARCH, DEVELOPMENT AND ACQUISITION 1000 NAVY PENTAGON WASHINGTON DC 20350-1000

JUN 2 6 2006

MEMORANDUM FOR DEPARTMENT OF DEFENSE INSPECTOR GENERAL

SUBJECT: Comments to Department of Defense Office of Inspector General Draft Proposed Report, D2005-D000LD-0113 dtd May 25, 2006

Reference: (a) Department of Defense Office of Inspector General (DODIG) Draft Proposed Report, D2005-D000LD-0113 dtd May 25, 2006

In response to your request of May 25, 2006, the Department of the Navy (DoN) has reviewed reference (a). Comments to reference (a) Recommendations and Material Management Control Weaknesses are attached.

Michal & Kund Nicholas J. Kunesh

Attachment: As Stated

Copy to: AGC DASN(LOG) NAVSUPSYSCOM SUBJECT: Comments to Department of Defense Office of Inspector General Draft Proposed Report, D2005-D000LD-0113 dtd May 25, 2006

DODIG Recommendations:

- 1. Recommend that the Commander, Naval Supply Systems Command (NAVSUP) establish management and oversight written procedures for performance-based logistics (PBL) contracts that require the Naval Inventory Control Point Philadelphia:
 - Verify and document results of all contractor-reported performance metrics and maintain evidence of the verification.

Response:

Concur with the recommendation. NAVSUP plans to issue policy on verifying results of contractor-reported performance metrics and on maintaining evidence of the verification. Target completion date for issuing policy is September 20, 2006.

b. Establish a time frame for performing flight hour and other required reconciliations consistent with the contract requirements, complete those reconciliations within the time frame, and document the results.

Response:

Concur with the recommendation. NAVSUP plans to issue policy for establishing time frames for performing flight hour and other required reconciliations consistent with the contract requirements, to complete those reconciliations within the time frame, and to document the results. Target date for issuing policy is September 20, 2006.

 Establish a time frame for completing PBL contract modifications related to reconciliations and require issuance of the modifications in accordance with the time frame.

Response:

Partially concur with the recommendation. NAVSUP recognizes that PBL contract modifications related to reconciliations should be negotiated and completed expeditiously, especially those that would result in reduction in the funds being paid to the contractor. However, contract modification negotiations can be complex and are contract unique and negotiation time frames should not be "artificially" limited and standardized. NAVSUP plans to issue policy on this subject by September 20, 2006.

 d. Periodically update PBL Business Case Analyses (BCA) to determine if the Navy realized the projected cost avoidances and if the PBL approach remains valid.

Response:

Concur with the recommendation. BCAs for fixed-price PBLs will be updated when changes in the underlying assumptions result in modifications to original contract cost. BCAs for cost-plus PBLs will be updated annually. It should be noted that the PBL BCA done by the NAVICP is used as a "go/no go" tool to determine whether a PBL is the best option for Navy Working Capital Fund (NWCF) material support. The BCA done at the Program Management level to determine the best material support strategy is a different BCA, and updating the Program level BCA is the responsibility of the Program Management Office which is outside of NAVSUP and the NAVICP. NAVSUP plans to issue policy on this subject by September 20, 2006.

2. Recommend that the Commander, NAVICP – Philadelphia establish management controls to ensure compliance with the procedures for contract-required reconciliation.

Response:

Concur with the recommendation. NAVICP will establish an assessable unit to ensure compliance with the procedures for contract-required reconciliation and to ensure adequate and consistent documentation of PBL contracts. This assessable unit will be incorporated into the next management control process review cycle. Target completion date for establishing an assessable unit date is December 1, 2006.

DODIG Finding:

Management and Oversight of H-60 SeaHawk Performance-Based Logistics Contracts.

The Program Office and NAVICP identified and documented a sound process for preparing and developing H-60 SeaHawk BCA and PBL strategies. Because, the Navy aggressively adopted and implemented the H-60 SeaHawk PBL strategy, the Program Office realized benefits from the strategy, which included reported increases in availability and reliability, training opportunities, Navy depot workload, and product improvements. However, the Program Office and NAVICP were unable to document their effectiveness in managing the PBL contracts. They could not document their effectiveness because of a lack of contract management and oversight. As a result, NAVICP could not demonstrate whether H-60 SeaHawk PBL contract incentive payments were accurate and could not determine if any H-60 SeaHawk PBL efforts reduced total ownership costs.

Response

Concur with the finding. However, language on pages 5 and 14 of the draft proposed report states that lack of NAVICP oversight and management made it so that NAVICP was unable to determine the effectiveness of the program. The Department of the Navy recommends the following changes to the draft proposed report language to more accurately describe the situation:

Recommend modifying page 5 to read (recommended changes are in bold print):

Management and Oversight **Procedures Applicable to** H-60 Seahawk Performance-Based Logistics Contracts

...the Program Office and the NAVICP were unable to document their effectiveness in managing the PBL contracts. They could not document their effectiveness because of a lack of adequate contract management and oversight procedures that required written documentation. As a result, NAVICP could not document whether H-60 Seahawk PBL contract incentive payments were accurate and could not document if any H-60 Seahawk PBL efforts reduced total ownership costs.

Recommend modifying page 14, paragraph two under Conclusion to read (recommended changes are in bold print):

NAVICP should improve some of its contract administration procedures. Because, it inconsistently and inadequately documented monitoring of contractor performance, NAVICP could not **provide evidence** that the results the contractors reported justified the incentives paid.

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